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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,162	07/17/2000	Hiroaki Nakamura	Q58736	7412

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Sughrue, Mion, Zinn, Macpeak & Seas
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EXAMINER

LAMB, TWYLER MARIE

ART UNIT PAPER NUMBER

2622

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,162

Applicant(s)

NAKAMURA, HIROAKI

Examiner

Twyler M. Lamb

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13, 15 and 18 is/are rejected.
- 7) ☒ Claim(s) 9-12, 14, 16, 17 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima (US 6,701,011) in view of Shibahara et al. (Shibahara) (US 6,538,768).

With regard to claim 1, Nakajima discloses a storage printer (Figure 1; col 1, lines 13-17; col 31, lines 19-21) comprising: an image processing unit (image processing apparatus 1) that analyzes an original image data acquired from an image data supply source (image input device 5) to set image processing conditions (col 4, line 53 – col 5, line 9; col 5, line 54 – col 6, line 2) and which processes said original image data in accordance with settings of the image processing conditions so as to produce outputting image data (col 4, line 53 – col 5, line 9; col 5, line 54 – col 6, line 6); a printing unit (printing device 3) that makes a print using said outputting image data (col 5, lines 58-60); a storage (for storing a result of processing in said image processing unit (col 2, line 50 – col 3, line 16; col 5, line 64 – col 6, line 2).

Though Nakajima discloses printing the resulting processed image data, he does not specifically teach a reading unit that reads said result of processing from said storage and supplies it into either said image processing unit or said printing unit or

both, wherein said result of processing has access information for accessing said result of processing in said storage.

Shibahara discloses an image processing apparatus that includes a reading unit (DMA Control unit 308) that reads said result of processing from said storage and supplies it into either said image processing unit or said printing unit or both (col 12, lines 17-23), wherein said result of processing has access information for accessing said result of processing in said storage (col 12, line 56 – col 13, line 13).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include a reading unit that reads said result of processing from said storage and supplies it into either said image processing unit or said printing unit or both, wherein said result of processing has access information for accessing said result of processing in said storage as taught by Shibahara. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Shibahara to perform image processing on certain data stored in a memory and print the resulting processed image data as taught by Shibahara in col 12, line 56 – col 13, line 13.

With regard to claim 2, Nakajima as modified also discloses wherein said result of processing in said image processing unit is at least one member of the group consisting of said outputting image data, a combination of said outputting image data and the original image data therefor, a combination of said outputting image data and said image processing conditions, therefor, and a combination of said original image

data and said image processing conditions thereof (col 4, line 53 – col 5, line 9; col 5, line 54 – col 6, line 6).

With regard to claim 3, Nakajima as modified does not teach wherein said storage is a removable storage medium.

Shibahara discloses an image processing apparatus that includes wherein said storage is a removable storage medium (col 18, line 37 – col 19, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include wherein said storage is a removable storage medium as taught by Shibahara. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Shibahara to perform image processing on certain data stored in a memory and print the resulting processed image data as taught by Shibahara in col 12, line 56 – col 13, line 13.

With regard to claim 4, Nakajima as modified does not teach wherein said storage medium is at least one member of the group consisting of a digital video disk, a recordable compact disk, a semiconductor memory, a magneto-optical recording medium and a removable hard disk.

Shibahara discloses an image processing apparatus that includes wherein said storage medium is at least one member of the group consisting of a digital video disk, a recordable compact disk, a semiconductor memory, a magneto-optical recording medium and a removable hard disk (col 18, line 37 – col 19, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include wherein said storage medium is at least one member of the group consisting of a digital video disk, a recordable compact disk, a semiconductor memory, a magneto-optical recording medium and a removable hard disk as taught by Shibahara. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Shibahara to perform image processing on certain data stored in a memory and print the resulting processed image data as taught by Shibahara in col 12, line 56 – col 13, line 13.

With regard to claim 5, Nakajima as modified does not teach wherein said storage is externally connected thereto via a wire or radio waves.

Shibahara discloses an image processing apparatus that includes wherein said storage is externally connected thereto via a wire or radio waves (col 18, line 37 – col 19, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include wherein said storage is externally connected thereto via a wire or radio waves as taught by Shibahara. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Shibahara to perform image processing on certain data stored in a memory and print the resulting processed image data as taught by Shibahara in col 12, line 56 – col 13, line 13.

With regard to claim 6, Nakajima as modified does not teach further comprising: a transmission unit for supplying an external equipment with at least one member of the group consisting of said original image data, said outputting image data and said image processing conditions.

Shibahara discloses an image processing apparatus that includes further comprising: a transmission unit for supplying an external equipment with at least one member of the group consisting of said original image data, said outputting image data and said image processing conditions (col 11, line 51 – col 12, line 61).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include further comprising: a transmission unit for supplying an external equipment with at least one member of the group consisting of said original image data, said outputting image data and said image processing conditions. as taught by Shibahara. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Shibahara to perform image processing on certain data stored in a memory and print the resulting processed image data as taught by Shibahara in col 12, line 56 – col 13, line 13.

With regard to claim 7, Nakajima as modified also discloses further comprising: a display unit for displaying said outputting image data before said printing unit makes the print (col 4, line 53 – col 6, line 18).

With regard to claim 8, Nakajima as modified also discloses further comprising: a search unit for searching for at least one member selected from the group consisting of

said original image data, said outputting image data and said image processing conditions which are stored in said storage using a keyword (col 6, lines 18-25).

With regard to claim 18, Nakajima as modified does not teach wherein said removable storage medium comprises a zip disk.

Shibahara discloses an image processing apparatus that includes wherein said removable storage medium comprises a zip disk (col 18, line 37 – col 19, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include wherein said removable storage medium comprises a zip disk as taught by Shibahara. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Shibahara to perform image processing on certain data stored in a memory and print the resulting processed image data as taught by Shibahara in col 12, line 56 – col 13, line 13.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima (US 6,701,011) in view of Yamamoto et al. (Yamamoto) (US 5,652,830).

With regard to claim 13, Nakajima as modified does not teach wherein analyzing an original image data acquired from an image data supply source comprises: reading the original image data; constructing density histograms; computing image characteristic quantities computing conditions for image processing steps to be performed in a data processing section of the image processing unit; and setting the computed conditions in the data processing section.

Yamamoto discloses a data storage apparatus that includes wherein analyzing an original image data acquired from an image data supply source comprises: reading the original image data; constructing density histograms; computing image characteristic quantities computing conditions for image processing steps to be performed in a data processing section of the image processing unit; and setting the computed conditions in the data processing section (col 17, lines 43-48; col 28, lines 12-47).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include wherein analyzing an original image data acquired from an image data supply source comprises: reading the original image data; constructing density histograms; computing image characteristic quantities computing conditions for image processing steps to be performed in a data processing section of the image processing unit; and setting the computed conditions in the data processing section as taught by Yamamoto. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Yamamoto to produce accurate densities in a document as taught by Yamamoto in col 28, lines 12-47.

4. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima (US 6,701,011) in view of Tsuchitai (US 5,872,900).

With regard to claim 15, Nakajima as modified does not teach wherein the printing unit comprises; back printing capabilities, wherein information is recorded on a back side of an image print.

Tsuchittoi discloses an information processing apparatus that includes wherein the printing unit comprises; back printing capabilities, wherein information is recorded on a back side of an image print (col 4, line 59 – col 5, line 20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima to include wherein the printing unit comprises; back printing capabilities, wherein information is recorded on a back side of an image print as taught by Tsuchittoi. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Nakajima by the teaching of Tsuchittoi to provide two sided printed as taught by Tsuchittoi in col 4, line 59 – col 5, line 20.

Allowable Subject Matter


5. Claims 9-12, 14, 16, 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler M. Lamb whose telephone number is 571-272-7406. The examiner can normally be reached on M-Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Twyler M. Lamb
Primary Examiner
Art Unit 2622